

Project Leader's Report

April - 2004



DMSE
DISTURBANCE AND MANAGEMENT
OF SOUTHERN ECOSYSTEMS

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Technology Transfer :

- Gary Achtemeier gave a seminar at NC State University on "The problem of prescribed burning and highway visibility - modeling the movement of smoke on the ground at night."
- Gary Achtemeier presented a talk on PB-Piedmont to the South Carolina Forestry Commission, and met with Bill Boykin (Deputy State Forester), John Dickinson (Pee Dee Regional Forester), Larry Barr (Fire Protection Officer) and Harry Blount (GIS Manager) to discuss installing the model statewide.
- Ken Outcalt has been invited by the National Park Service to review the fire plan for the Cumberland Island National Seashore.
- Outcalt will attend a workshop in June at Tall Timbers Fire Ecology Lab in Tallahassee to present his Fire Regime

Condition Class models for review. He attended a workshop in March to begin development of FRCC models specific to conditions in the South.

- Outcalt will attend a planning meeting for the next Biennial Silviculture Research Conference, to be held in Memphis.
- Unit scientists will be busy the rest of the fiscal year giving presentations on research at professional meetings. Ralph DiCosty will attend the Eurosoil 2004 meeting in September in Freiburg, Germany and present a paper "Soil Black Carbon Levels and Soil Organic Matter Quality Under Interval Prescribed Burning in the Southeastern United States," co-authored with Steve Kelly, NREL, Tim Rials, University of Tennessee, and John Stanturf.

Outreach Activities:

Seven organized groups totaling 154 people visited the Brender Forest during April. Groups included two Mercer University Biology outdoor labs studying forest succession; Boy Scout Troop 170 from Macon; the silviculture class from Abraham Baldwin Agriculture College's Forestry and Wildlife School; Mercer University Biology Department's Dendrology Outdoor Lab. Recently completed 5 weekends of turkey hunts in cooperation with the Piedmont National Wildlife Refuge, with an estimated 200 hunters.

John Perovitz, a retired Southern Research Station employee, is now working as a contractor for Georgia Forestry Commission putting in fuel plots at Brender Forest.

Continued

Approximately 45 visitors came by the office at the Brender Forest for information and 96 people signed the register at the Hitchiti Interpretive Trail.

Several workshops were conducted at Brender Forest. They were: a logging road layout and a construction workshop, using the new "Ideal Logging Road" and Plum Creek Timber Company held a "Best Management Practices Workshop" in preparation for their upcoming sustainable forestry initiative audit.



- John Stanturf will present a paper "Disturbance Dynamics of Forested Ecosystems" at the IUFRO Conference Natural Disturbances and Ecosystem-Based Forest Management, Tartu, Estonia in May.

- Cynthia Fowler and Rick Reitz will attend a Science Delivery and Application Workshop, sponsored by the Joint Fire Sciences Program, to be held 25-26 May in Boise, Idaho.

- Fowler will attend the Joint Fire Science Program's Research Information and Management System Workshop on May 27 in Boise and give a talk "The Integration of Multiple Internet-Based Resources for Fire Information."

- Stanturf will give two papers and moderate a session at the IUFRO Division 1 (Silviculture) meeting in Montpellier, France in June. The papers are "Restoring Bottomland Hardwood Forests: A Comparison of Four Techniques" co-authored by Emile Gardiner, James Shepard, Callie Schweitzer, Jeffrey Portwood, and Lamar Dorris; and "Silviculture for Restoration of Degraded Temperate and Boreal Forests" co-authored with Palle Madsen and Emile Gardiner.

- Joe O'Brien has been invited to give a paper at the 12th annual Caribbean Foresters Meeting, organized by the Puerto Rican Conservation Foundation to be held June 7-11 in Isla Verde, Puerto Rico. IITF is sponsoring the conference and his trip. O'Brien's paper is entitled "Fire in tropical pine forests." Representatives from 20 countries will attend: Antigua and Barbuda, Barbados, Belize, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe,

Guyana, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, St Kitts & Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago and the USA.

- Tim Rials, Director of the Tennessee Forest Products Center and collaborator of DiCosty and Stanturf on developing innovative methods to assess soil carbon, will present some of the work at the International Diffuse Reflectance Conference in Chambersburg, PA in August.

- Cynthia Fowler will present at the International Society of Ethnobiology, 9th International Congress in June at the University of Kent in Canterbury, England; her paper is entitled "The Dynamics of Agroforestry in the Contexts of Multiple, Overlapping Market and Tenurial Systems."

- Mac Callaham, Joe O'Brien, and Ken Outcalt will present at the Ecological Society of America annual meeting in Portland in August. Talks include Outcalt and Wade, "Response of a longleaf pine (*Pinus palustris*) flatwoods community to long-term dormant season prescribed burning;" Callaham and Waldrop, "Ecological impacts of fuel reduction treatments in the Piedmont and southern Appalachian Mountains" and a poster entitled "Prescribed fire effects on soil carbon and soil microbes in pine flatwoods of north Florida," by O'Brien, Callaham, DiCosty, and Mark Williams (UGA).

- Callaham will present an invited talk at the Soil Zoology Colloquium in September, to be held in Rouen, France. His invited talk for the symposium on earthworm invasions is

“Policy and management responses to earthworm invasions” by Callaham, G. Gonzalez, C. Hale, L. Heneghan, S. Lachnicht, and X. Zou; and a poster “Long-term land use effects on soil invertebrate communities in southern Appalachian Piedmont soils” by Callaham, D. Richter, D. Coleman, and M. Hofmockel.



Meetings / Reports :

- Unit scientists (Achteimeier, Goodrick, Liu, and Stanturf) met with Darold Ward, retired Project Leader from the Rocky Mountain Station in Missoula, Montana and Dale Wade, retired scientist in the unit, to discuss the Southeast Emissions Study that was conducted many years ago. Ward designed the study and Wade obtained cooperation and funding from many agencies in the SE. The purpose of the meeting was for the current scientists to understand the objectives of the study, the data collected, and whether the reports that we have received from the Rocky Mountain Station are complete and sufficient. We concluded that many more data were collected that could be used to help managers address air quality problems than were used to generate the reports we received, and the reports are woefully inadequate. Further efforts will be made to obtain the data and generate useful products for land managers in the South.

- Yong Liu attended a conference on Integrated Regional Studies for Global Sustainability, held at Auburn University. He discussed possible collaboration with Hanqian Tian (Auburn University) in their research program on the Monsoon Asia Integrated Regional Study, which is now in the planning stages.

- Liu, Goodrick and Stanturf visited Steve McNulty and Ge Sun in Raleigh, NC to discuss collaboration between the units on integrating regional atmospheric models with ecological models to understand the impacts of global change and disturbances on natural resources in the southern U.S. A very productive meeting resulted in immediate collaboration and a plan for longer-term projects that would combine the expertise of the two staffs. Initially, we will test the sensitivity of the RegCM (Regional Climate Model) to land use changes at coarse spatial resolution (about 50 km) over the past 10 years, using hypothetical perturbations to simulate pre-industrial revolution land use to examine the largest possible signals. Another fairly simple short-term project uses an improved evapotranspiration model in the Keetch-Byram Drought Index. This should result in a tool that land managers adopt quickly, as they are already familiar with the KBDI.

- Over the longer-term (next 5 years), we plan to link a regional scale atmospheric model to forest ecosystem models (e.g. PnET), and a monthly time step hydrology model and to validate the integrated modeling system at the largebasin scale across the South.

- Gary Achteimeier met with Al Riebau (WO), Graham Mills (Australia), and Brian Potter (EAMC) to exchange information and present an overview of SHRMC research with an emphasis on PB-Piedmont and coupled fire/ atmosphere models inputting into the Rabbit Rules model. Mills was very interested in PB-Piedmont as Australia is dealing with smoke movement at night problems.



Left to right:
Al Riebau , Gary Achteimeier, and Graham Mills.

- Tom Waldrop and Ken Outcalt attended the annual meeting of Principal Investigators for the Joint Fire Science Program. The meeting was held in Phoenix, Arizona. Tom discussed his work using hyperspectral image analysis and landscape ecosystem classification to classify fuels in the southern Appalachian

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Mountains. The presentation was well received by the audience of fire researchers from across the United States. Outcalt made two presentations entitled “The value of fuel management in reducing wildfire damage to overstory trees” and “Dormant season prescription fires to reduce hazardous fuel loads on the South Carolina Coastal Plain.”

- The USDA IFAGA Advisory Committee met on April 16, in Raleigh, NC, to review the North Carolina State University research project entitled “Wood fiber quality of juvenile pine: Characterization and utilization.” Alex Clark, a member of the Advisory Committee, attended the review meeting.

- A new Working Party on Environmental Uses of Willows and Poplars (WP6) has been formed under the auspices of the International Poplar Commission (IPC). Activities that fall into the sector of

environmental uses include buffer zones/ riparian plantings; phytoremediation (e.g. phytoextraction, phytovolatilisation); geoengineering of stream bank revetment, roadside engineering, and slope stabilization; shelterbelts; urban and peri-urban forestry, particularly in arid and semi-arid temperate zones where willows and poplars often are dominant; bioenergy; and other uses such as carbon sequestration, wildlife habitat, agroforestry, social benefits from green space, and landscape planning. Chair of WP6 is Kurth Perttu (kurth.perttu@lto.slu.se) and Secretary is Drusilla Riddell-Black (drusilla@lupus-science.co.uk). An organizational meeting will be held in conjunction with the 22 Session of the IPC to be held in Nov-Dec in Santiago, Chile. Stanturf plans to attend, wearing his IEA hat.

- Joseph O’Brien acted as the representative for RWU-4104 at the Red

Card meeting at the Headquarters for Chattahoochee and Oconee National Forests on April 30. In attendance were the majority of the Fire Management Officers (FMOs) for the various ranger districts. Training needs and schedules were discussed and 4104 employees with red cards were added to the database maintained by the National Forest.



Funding :

- Yongqiang Liu submitted a proposal to NASA/DOE/USDA, “Contributions of wildfires in the western U.S. to the carbon budget.” Co-Principal Investigators include Hanqin Tian (Auburn University), John Qu (George Mason University), and John Stanturf. The proposal, for \$599,491, would investigate the role of fire disturbances on carbon emissions and ecosystem carbon dynamics in the western U.S., using a combination of remote sensing, historical fire data, and ecosystem and atmospheric modeling.

- Ralph DiCosty received \$1,500 from the Southern Research Station’s Civil Rights Committee to hire a summer student. The student will work in the Soil Quality

Lab, analyzing soils and plants on a carbon-nitrogen analyzer under the supervision of Ralph DiCosty, and with training from Corey Babb.

- The unit received \$109,574 in Supplemental Fire Plan funding from carryover from the Station at mid-year.

- Mac Callaham was one of a large team of people who submitted a pre-proposal to the National Science Foundation, Integrative Graduate Education and Research Training (IGERT). The proposal is for funding of an IGERT Center at the University of Georgia campus focusing on integrative studies in soil science and soil biology.

Visitors :

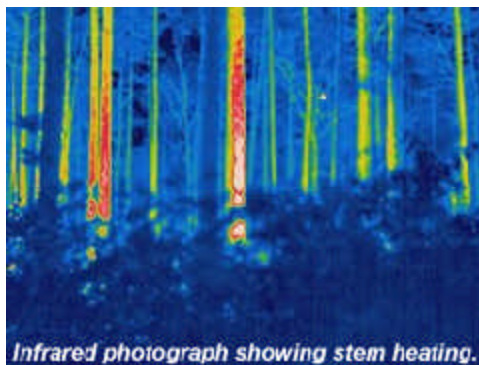


• Dr. Graeme Lockaby, Professor and Associate Dean for Research at Auburn University, visited Stanturf to discuss their collaboration on the Columbus Watershed project. They tentatively

planned a conference on "Carbon Budgets in Urbanizing Landscapes" to be held in 2005 or 2006, probably in Atlanta.

• Prof. Yi Haoruo, Research Professor & Deputy Director, Research Institute of Forest Resources Information Techniques, Chinese Academy of Forestry, Beijing, China will visit the unit on July 12 to discuss fire research. He is visiting various fire research and management organizations this summer. Ron Herbster, Region 8, is arranging his visit to the South. While in Beijing for a meeting June, Yong Liu will meet with Prof. Yi and Prof. Zhan Qing Li, University of Maryland.

• Dr. Mark Parman of Perkin Elmer Instruments spent two days with Corey Babb and Ralph DiCosty providing training for and optimizing the Unit's Inductively Coupled Plasma Optical Emission Spectrometer (ICP). The instrument is now ready for use in determining the levels of key nutrient elements (e.g. potassium, phosphorus, calcium, magnesium) in plant and soil samples. Multiple elements can be measured in a single sample run. The instrument works by measuring the amounts of wavelengths of light emitted when the elements of interest are introduced into high-energy argon plasma.



Personnel News :

• New Student workers joining the unit in Athens this month are Claire Samaha, Morgan Taylor, Dana Camp, and Gayle Gilmore. Samaha will work in the Soil Quality Lab, Camp with Mac Callahan, and Taylor and Gilmore on administrative tasks and data entry.



(Clockwise from noon, Gilmore, Camp, Taylor, Westbrook)

• The RWU hired Michael Westbrook, an undergraduate in forestry at the University of Georgia, to work with the Wood Quality Team.

• New student workers in Clemson are Latice Fuentes, Jay Garcia, Chuck Harrell, Aaron Stottlemeyer, Jacob Foose, and Horace Gambrell.

• We bid a partial good-bye to Andrea Leach, who is taking a position as Lab Coordinator in the Department of Cell Biology at UGA. Andrea will continue work intermittently to finish some manuscripts with John Stanturf.



• The RWU recently learned that Dr. F. Thomas Lloyd was awarded the Chief's New Century of Service Award in June 2003. Tom Lloyd was project leader of the former pine-hardwood silviculture research work that was incorporated into SRS-4104 in 1995. He was attached to SRS-4101 (Bent Creek) until his untimely death in April 2002. The award was based on customer service, cooperation, mentoring, and exemplifying Forest Service values. Tom Waldrop presented the award to Tom's son, John Lloyd, on May 3, 2004.

• Three M.S. Students, supported by the Piedmont and Appalachian team, successfully defended their theses in April at Clemson University. They were David Leput, Aaron Stottlemeyer and Aimee Livings.

News from around the Region :



• Sam Foster has assumed the duties of Director, Wildlife, Fish, Water, and Air Research Staff in the Washington Office. Doug Ryan, National Program Leader for Hydrology, is leaving the WO to become a Program Manager in the Pacific Northwest Research Station in Olympia, Washington.

• Eric Berg has become the new manager of the Joint Fire Sciences Program, taking over the reins from the retiring Bob Clark. Eric was formerly with the Southern Research Station in Bent Creek, North Carolina.



• Dave Wear, PL, SRS-4851 at Research Triangle Park, North Carolina has assumed national responsibility for timber supply forecasting for the Resources Planning Act (RPA) reports.

• A report released by the California Forest Products Commission claims that government policies that resulted in declining harvests have exported jobs out of California and created overcrowded forests that put more communities at risk for wildfire. California is importing more wood than ever, with harvesting of trees in the state down more than 60 percent over the last 15 years, the California Forest Products Commission reported in its first annual report on the state of the industry. Despite having some of the most productive forestlands in the world, California imports between 70 and 80 percent of the wood used in the state, with much of that wood coming from countries with lower standards for environmental protection. Over the last 15 years, 15,000 forestry jobs have been exported out of California. The Commission attributed the sharp decline in harvesting to two primary factors: a near-elimination of harvesting trees on government land and increasing regulatory red-tape that makes it harder and excessively expensive to responsibly harvest trees on privately-owned lands. According to statistics recently released by the California Board of Equalization, just 1.66 billion board feet was harvested in California in 2003 — compared to 4.67 billion board feet in 1988. Harvesting on government-owned lands is down more than 90 percent over the last 15 years, while harvesting on privately owned lands is down more than 40 percent during that same time period. The loss of infrastructure to process wood is a problem that is beginning to manifest itself in the state. The Commission website is <http://www.calforests.org>

(Source: Business Wire)

• Furniture production in Western Europe is worth about Euro 75 billion accounting for 35.6% of the world furniture supply, according to the consulting group Research and Markets. Italy is the leading furniture producer in Europe, followed by Germany and France. The European furniture industry is characterized by the presence of small to medium-sized companies and a low degree of concentration: the top ten European furniture companies provide less than 11% of total European furniture supply. A number of European countries play an important role in international furniture trade: Italy, Germany, France and Denmark are among the top ten furniture exporters in the world. The European furniture sector is witnessing an increasing internationalization of distribution. (Source: Business Wire)

• The Convention on Biodiversity has launched an Internet portal to seek and provide support and partnerships in order to facilitate implementation of the expanded program of work on forest biodiversity. The portal is intended to facilitate implementing the expanded program of work on forests, for promoting network development amongst interested Parties, governments and stakeholders, and as a way of reviewing the implementation of the expanded work program. The portal will also provide the opportunity for users to report on relevant case studies and best practices. The portal can be accessed at <http://www.biodiv.org/programmes/areas/forest/portal/home.shtml>.

(Source: Convention on Biological Diversity Secretariat)

• Funding for the Environmental Research and Education (ERE) portfolio of the National Science Foundation (NSF) would decline by 0.2 percent (to \$932.2 million) under the President's budget request for FY 2005. This is the first time that ERE funding would decline since the National Science Board identified environmental research as one of NSF's "highest priorities" in 2000. In contrast to the proposed cut for ERE funding, the total NSF budget would increase by 3 percent in FY 2005. The ERE portfolio is a crosscutting "virtual directorate" that coordinates environmental activities across the entire agency. From FY 1999 to 2001 the ERE account grew more rapidly than the overall NSF budget (30.7 percent for ERE versus 20.3 percent for total NSF). However, the ERE growth rate has trailed the total NSF growth rate since that time. From FY 2002 to FY 2005 (request), the ERE budget grew by only 13.1 percent while the total NSF budget grew by 20.3 percent. For the entire period from FY 1999 to 2005 (request), the ERE budget grew by 56.6 percent—an increase that is almost

News from around the Region :

indistinguishable from NSF's overall growth of 55.7 percent over the same interval. All of NSF's disciplinary directorates include support for ERE, with the majority in Geosciences (55 percent) and Biological Sciences (23 percent). After several years of rapid growth, funding for the priority area on Biocomplexity in the Environment, the flagship program of the ERE portfolio, would be flat at \$99.8 million in FY 2005. (Source: National Council for Science and the Environment)

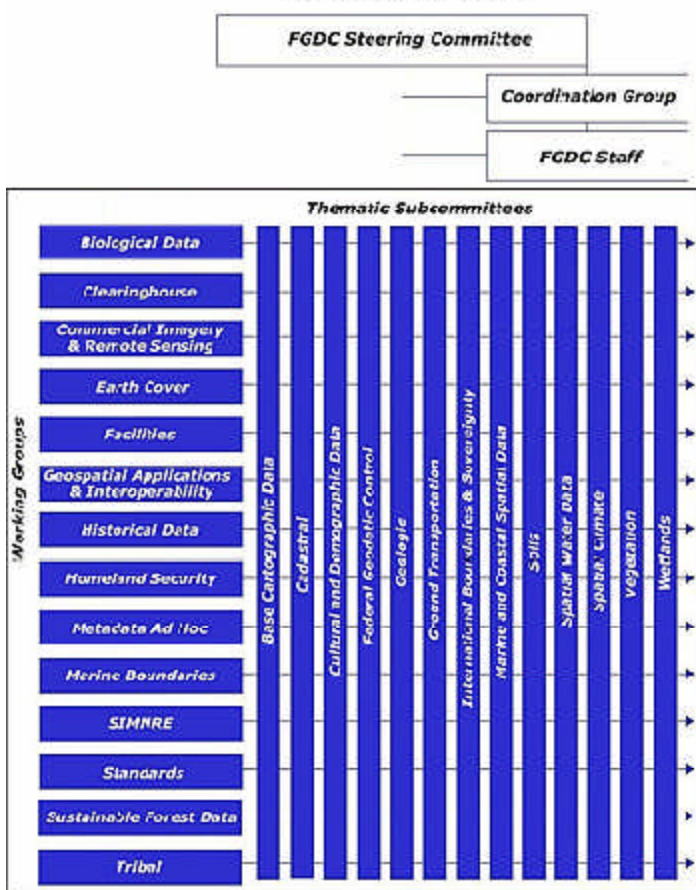
<http://www.ncseonline.org/updates/page.cfm?fid=3672>

- An interagency committee has developed a set of guidelines for reviewing geospatial data, deciding if it should be made available to the public, and defining what security approach to take. The guidelines, which are not binding, address procedures for identifying sensitive information and reviewing decisions on access restrictions. The guidelines lay out 14 steps for organizations that originate geospatial data to use in determining if restrictions are needed. The steps are based on three factors: Can the data be used for selecting targets or for planning or executing attacks? Is the data available elsewhere? Do the benefits of making the data available outweigh the risks? If significant risk is found, an organization should decide whether to remove the data or restrict access to it. FGDC will accept comments via email at guidelines@fgdc.gov until June 2. http://www.gcn.com/vol1_no1/daily-updates/25834-1.html. (Source: Federal Geospatial Data Council).

- A comprise to allow the United States and 10 other countries to continue use of limited quantities of the popular pesticide methyl bromide for agricultural applications was reached by signatories to the Montreal Protocol. The ban of Methyl Bromide under the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer would have affected 11 countries, which were facing a year-end deadline to phase out their uses of methyl bromide. By adopting a "double-cap" concept that distinguishes exemption levels according to uses of old and new production of methyl bromide, more than 180 parties agreed

the United States and the 10 other nations combined could be exempted for use of 13,438 metric tons of methyl bromide because of the lack of technically and economically feasible alternatives. The U.S. allowance averaged out to about 67 percent of the total exemption allocation. The United States succeeded in getting approval for its 2005 critical-use request, which amounted to 8,942 metric tons, or 35% of its 1991 baseline use of methyl bromide.

Federal Geographic Data Committee (FGDC) Organization



GPRA Accomplishments:

Category	FY 2003	FY 2004
	Total	To Date
Number of Refereed Journal Publications	24	14
Number of Non-Refereed Publications (include abstracts)	50	64
Number of Publications (refereed + non-refereed)	74	78
Number of Tours	66	36
Number of Short Courses/Training	8	17
Number of Invited Presentations to Scientific Organizations	8	11
Number of Invited Presentations to Lay Organizations	45	28
Volunteer Presentations to Scientific Organizations (non-GPRA)	27	36
Number of Technology Transfer Activities (other than above)	135	84
Outside Funding	\$1,955,455	\$2,564,574

Publications :

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Upcoming Events :

2004

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| May 3-7 | 12th meeting of the International Boreal Forest Research Association, "Climate-Disturbance Interactions in Boreal Forest Ecosystems", Fairbanks, Alaska http://www.lter.uaf.edu/ibfra/default.cfm |
| May 4-5 | AF&PA's Agenda 2020 Wood and Wood Composites Task Group—formerly the Committee on Research Evaluation (CORE)—meeting, Forest Products Lab in Madison, WI; Alex Clark to attend and present 'Impact of fertilization on wood properties of loblolly pine' |
| May 11-13 | Interagency Fire and Air Group meeting, Athens; contact Gary Achtemeier (gachtemeier@fs.fed.us) for information |
| May 18-21 | Creating solutions for using small trees, SmallWood 2004; Sacramento, CA; http://www.forestprod.com |
| May 25-29 | IUFRO Conference, Restoration of forest soils in polluted areas, Praha, Czech Republic, http://www.ldf.mendelu.cz/konference/rfspa/ |
| May 27-29 | IUFRO Conference Natural Disturbances and Ecosystem-Based Forest Management, Tartu, Estonia; Stanturf to attend and present http://www.eau.ee/~ecosyst/ |
| *Jun 7-11 | 12 th annual Caribbean Foresters Meeting, Isla Verde, Puerto Rico; O'Brien to present invited paper |
| Jun 10-11 | Energy with Agricultural Carbon Utilization Symposium - A Sustainable Alternative to Sequestration; Athens, GA http://www.georgiaitp.org/carbon |
| *Jun 13-18 | International Society of Ethnobiology, 9th International Congress, University of Kent in Canterbury, England; Fowler to attend and present |
| Jun 14-18 | IUFRO Division 1 - Silviculture Conference, CIRADForest, in Montpellier, France; Stanturf to attend and present two papers |

Upcoming Events :

Jun 15-18	2 nd International Conference on Forest Measurements and Quantitative Methods and the annual meeting of the Southern Mensurationists; Hot Springs, AR; http://www.mensurationists.com/event/events.htm	Sep 1-2	Forest IT 2004 Exhibition and Congress, Jyväskylä, Finland; http://www.ForestIT.net
Jun 24-26	Greenhouse gas emissions and abrupt climate change: Positive options and robust policy, Paris, France; dates and location tentative; http://www.iiasa.ac.at	Sep 3-7	European Forest Institute (EFI) Annual Meeting, Bangor, Wales (UK) and IUFRO International Conference Transformation to Continuous Cover Forestry in a Changing Environment Consequences, Methods, Scenarios, Analyses http://www.efi.fi/news/2004/CallforPapers.pdf
Jun 24-26	Greenhouse gas emissions and abrupt climate change: Positive options and robust policy, Paris, France; dates and location tentative; http://www.iiasa.ac.at	Sep 4-12	EUROSOIL, Freiburg, Germany; www.forst.uni-freiburg.de/eurosoil
*Jun 27-30	The Forest Products Society, 58 th Annual Meeting, Grand Rapids, MI. Alex Clark to attend and make presentation.	Sep 12-16	IUFRO Conference Regenerating Mountain Forests, Kloster Seeon, Bavaria, Germany; http://www.forst.tu-muenchen.de/events/rmf2004/index_en.html
Jun 27-Jul 2	First Agroforestry World Congress, Orlando, FL http://conference.ifas.ufl.edu/wca/#background	Sep 20-22	IUFRO All Division 8 Conference, Conservation biology and ecosystem functioning in plantation forests, Bordeaux, France; http://www.pierroton.inra.fr/IEFC/manifestations/IUFROD8_2004registration.php
Jul 12-15	North American Forest Biology Workshop, Managing forest resources in the 21st century: An Integrated Approach; Michigan Technological University Houghton, MI http://www.forestbiology.org/	Sep 27-30	IUFRO Conference: The Economics and Management of High Productivity Plantations, Lugo, Spain; http://www.lugo.usc.es/iufro
Jul 25-31	7th INTECOL International Wetlands Conference, Utrecht, The Netherlands. http://www.bio.uu.nl/INTECOL	Oct 1-7	The National Wilderness Summit and Expo, Denver, CO; http://www.wilderness.net/40th
*Aug 1-8	Ecological Society America annual meeting, Portland, OR; Callahan, Outcalt, and O'Brien to attend and present	*Oct 2-6	Society American Foresters Annual Meeting, held jointly with Canadian Institute of Forestry, Edmonton, Alberta http://www.cif-saf-2004convention.org/natcon/
Aug 15-20	Large-Scale Experiments for Sustainable Forestry: Balancing Ecosystem Values; International IUFRO Workshop, Portland, OR. http://outreach.cof.orst.edu/ecosystem	Oct 17-22	North American Forestry Commission, Joint Meeting of Silviculture and Genetics Working Groups, Morelia, Michoacán, México; Stanturf to attend
Aug 23-27	Society Ecological Restoration International annual meeting, Victoria, BC; http://www.ser.org/meeting.php?pg=call4abstracts2004	*Oct 18-22	Advancing the Fundamental Sciences - A Conference for Forest Service Physical Scientists, Shelter Point Island, San Diego, CA; abstract due April 30 http://www.stream.fs.fed.us/EarthScience/NationalConference.html
*Aug 29-Sep 10	Soil Ecology Colloquium, Rouen, France; Callahan to attend and present invited paper; http://www.bondy.ird.fr/biosol/evenements/colloque-rouen/index.html	Oct 19-21	SRS Management Team meeting, Coweeta
		Oct 31-Nov 3	Soil Science Society of America Annual Meeting, Seattle, WA.

Upcoming Events :

Nov 6-8	Southeastern Society American Foresters Annual Meeting, Jacksonville, FL "Managing forests for wildlife"	2005	
Nov 8-12	Short Rotation Woody Crops Operations Working Group Biennial Meeting, Charleston, SC (date change)	*Feb 28-Mar 4	Southern Silvicultural Research Conference, Memphis http://www.srs.fs.usda.gov/oaks/osc
Nov 17-25	IUCN Third World Conservation Congress (WCC), Bangkok.	*Mar 13-16	Emerging Issues Along Urban/Rural Interfaces: Linking Science and Society; Atlanta, IUFRO 6.00; http://www.sfws.auburn.edu/urbanruralinterfaces/
Nov 17-19	Assessment of the 2003 drought and heat impacts on forests, international conference sponsored by University of Freiburg, European Forestry Institute, Baden-Württemberg Forestry, FVA; Freiburg im Breisgau, Germany	Aug 8-13	IUFRO World Congress, Brisbane, Australia. Stanturf to attend. http://www.iufro2005.com
Nov 24-26	Introduction of broadleaf species for sustainable forest management, international conference sponsored by SUSTMAN project at the University of Ulm; to be held in Reisingen, Germany, http://www.sustman.de/Symposium.htm	Aug/Sep	Society for Ecological Restoration 17th International Conference, Zaragoza, Spain.
*Nov 28-Dec 2	International Poplar Commission Session 22, Santiago, Chile; Stanturf to attend and present http://www.fao.org/forestry/foris/webview/forestry2/index.jsp?geoid=0&langId=1&siteId=1580	Oct 19-23	Society American Foresters Annual Meeting, Ft. Worth, TX
Dec 16-17	SOFOR GIS 2004, Athens, GA; http://www.gactr.uga.edu/conferences/forestry/index.html	Nov 6-10	Soil Science Society of American Annual Meeting, Salt Lake City, UT
		TBD	5th International Conference on Forest Vegetation Management, IUFRO Research Group 1.13.00 Forest Vegetation Management. Corvallis, Oregon, USA Contact: Robin Rose, robin.rose@orst.edu
		2006	
		Jul 9-15	18th World Congress of Soil Science, in Philadelphia, PA http://www.18wcss.org

SRS-4104 Project Leader's Report

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